

DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled
MAGNETO-RESISTANCE EFFECT ELEMENT, MAGNETO-RESISTANCE EFFECT HEAD,
MAGNETO-RESISTANCE TRANSDUCER SYSTEM, AND MAGNETIC STORAGE SYSTEM
the specification of which:

(check
one)

☒ is attached hereto

☐ was filed on _____, as
Application Serial No. _____
and was amended on _____
(if applicable)

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I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56*

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)			priority claimed
2000-236287	Japan	03/08/2000	X
(Number)	(Country)	(Day/Month/Year Filed)	yes no
(Number)	(Country)	(Day/Month/Year Filed)	yes no
(Number)	(Country)	(Day/Month/Year Filed)	yes no

I hereby claim the benefit under Title 35, United States Code, § 119 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.)

(Filing Date)

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(Status: patented, pending, abandoned)

Power of Attorney: As a named inventor, I hereby appoint C. Lamont Whitham, Reg. No. 22,424, Marshall M. Curtis, Reg. No. 33,138 and Michael E. Whitham, Reg. No. 32,635 as attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. All correspondence should be directed to McGuireWoods, 1750 Tysons Boulevard, Suite 1800, Tysons Corner, McLean, Virginia 22102-4215. Telephone calls should be directed to McGuireWoods, LLP at (703) 712-5000.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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Full Name of Sole

or First Inventor: Kazuhiko HAYASHI

Inventor's Signature Kazuhiko Hayashi (林) Date: July 16, 2001

Residence: Tokyo, Japan

Citizenship: Japanese

Post Office Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan

Full Name of Second

Joint Inventor: Junichi FUJIKATA

Inventor's Signature Junichi Fujikata (藤田) Date: July 16, 2001

Residence: Tokyo, Japan

Citizenship: Japanese

Post Office Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan

Full Name of Third

Joint Inventor: Tsutomu ISHI

Inventor's Signature Tsutomu Ishi (石) Date: July 16, 2001

Residence: Tokyo, Japan

Citizenship: Japanese

Post Office Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan

Full Name of Fourth

Joint Inventor: Shigeru MORI

Inventor's Signature Shigeru Mori (森) Date: July 16, 2001

Residence: Tokyo, Japan

Citizenship: Japanese

Post Office Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan

Full Name of Fifth

Joint Inventor: Keishi OHASHI

Inventor's Signature Keishi Ohashi (大橋) Date: July 16, 2001

Residence: Tokyo, Japan

Citizenship: Japanese

Post Office Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan

*Title 37, Code of Federal Regulations, § 1.56:

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith toward the Patent and Trademark Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and (1) it establishes, by itself or in combination with other information, a prima facie case of unpatentability; or (2) it refutes, or is inconsistent with, a position the applicant takes in: (i) opposing an argument of unpatentability relied on by the Office, or (ii) asserting an argument of patentability.

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Full Name of Sixth
or First Inventor: Masafumi NAKADA


Inventor's Signature Masafumi Nakada  Date: July 16, 2001

Residence: Tokyo, Japan

Citizenship: Japanese

Post Office Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan

Full Name of Seventh
Joint Inventor: Kiyokazu NAGAHARA

Inventor's Signature Kiyokazu Nagahara  Date: July 16, 2001

Residence: Tokyo, Japan

Citizenship: Japanese

Post Office Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan

Full Name of Eighth
Joint Inventor: Kunihiko ISHIHARA

Inventor's Signature Kunihiko Ishihara  Date: July 16, 2001

Residence: Tokyo, Japan

Citizenship: Japanese

Post Office Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan

Full Name of Ninth
Joint Inventor: Nobuyuki ISHIWATA

Inventor's Signature Nobuyuki Ishiwata  Date: July 16, 2001

Residence: Tokyo, Japan

Citizenship: Japanese

Post Office Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan

Full Name of Tenth
Joint Inventor: _____

Inventor's Signature _____ Date: _____

Residence: _____

Citizenship: _____

Post Office Address: _____

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*Title 37, Code of Federal Regulations, § 1.56:

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith toward the Patent and Trademark Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and (1) it establishes, by itself or in combination with other information, a prima facie case of unpatentability; or (2) it refutes, or is inconsistent with, a position the applicant takes in: (i) opposing an argument of unpatentability relied on by the Office, or (ii) asserting an argument of patentability.



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

OCTOBER 09, 2001

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101803796A

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UNITED STATES PATENT AND TRADEMARK OFFICE
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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/30/2001

REEL/FRAME: 012041/0546
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
HAYASHI, KAZUHIKO

DOC DATE: 07/16/2001

ASSIGNOR:
FUJIKATA, JUNICHI

DOC DATE: 07/16/2001

ASSIGNOR:
ISHI, TSUTOMU

DOC DATE: 07/16/2001

ASSIGNOR:
MORI, SHIGERU

DOC DATE: 07/16/2001

ASSIGNOR:
OHASHI, KEISHI

DOC DATE: 07/16/2001

ASSIGNOR:
NAKADA, MASAFUMI

DOC DATE: 07/16/2001

ASSIGNOR:
NAGAHARA, KIYOKAZU

DOC DATE: 07/16/2001

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012041/0546 PAGE 2

ASSIGNOR: .
ISHIHARA, KUNIIHIKO

DOC DATE: 07/16/2001

ASSIGNOR:
ISHIWATA, NOBUYUKI

DOC DATE: 07/16/2001

ASSIGNEE:
NEC CORPORATION
7-1, SHIBA 5-CHOME, MINATO-KU
TOKYO, JAPAN

SERIAL NUMBER: 09916529
PATENT NUMBER:

FILING DATE: 07/30/2001
ISSUE DATE:

PAULA MCCRAY, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

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ASSIGNMENT OF APPLICATION FOR PATENT

WHEREAS:

Kazuhiko HAYASHI, Junichi FUJIKATA
Tsutomu ISHI, Shigeru MORT,
Keishi OHASHI, Masafumi NAKADA,
Kiyokazu NAGAHARA, Kunihiro ISHIHARA and
Nobuyuki ISHIWATA of Tokyo, Japan

NAMES(S) AND ADDRESS(S)
OF INVENTOR(S)

COPY

c/o NEC Corporation
7-1, Shiba 5-chome, Minato-ku,
Tokyo, Japan

(hereinafter referred to as ASSIGNOR), have invented and
own a certain invention entitled:

TITLE OF INVENTION

MAGNETO-RESISTANCE EFFECT ELEMENT, MAGNETO-RESISTANCE
EFFECT HEAD, MAGNETO-RESISTANCE TRANSDUCER SYSTEM,
AND MAGNETIC STORAGE SYSTEM

for which application for Letters Patent of the United States
has been filed on

PARTICULARS OF APPLICATION

COPY

under Serial No.

WHEREAS: NEC Corporation

NAME AND ADDRESS OF ASSIGNEE

7-1, Shiba 5-chome, Minato-ku,
Tokyo, Japan

(hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire interest in, to and under said invention and the United States Letters Patent to be obtained therefor:

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:
Be it known that in consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the full and exclusive right, title and interest to said invention and all Letters Patent of the United States to be obtained therefor on said application or any continuation, division, renewal, substitute or reissue thereof for the full term or terms for which the same may be granted.

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ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale;

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent as may be known and accessible to ASSIGNOR and will testify as to the same in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce said application, said invention and said Letters Patent which may be necessary or desirable to carry out the purposes hereof.

IN WITNESS WHEREOF, have hereunto set hand and seal this day of July 16, 2001

FULL NAME(S) OF INVENTOR(S)

<u>Kazuhiko Hayashi</u>	Kazuhiko HAYASHI
<u>Junichi Fujikata</u>	Junichi FUJIKATA
<u>Tsutomu Ishi</u>	Tsutomu ISHI
<u>Shigeru Mori</u>	Shigeru MORI

WITNESSES:

Sumitake Watanabe Shigeru Mori

COPY

Instruction sheet for assignment

All information, names of inventor(s) and assignee, title of invention and particulars of application should be completed.

No witnessing or legalization is necessary. However, if this assignment is legalized then it will only be prime facie evidence of the execution of the assignment.

Signing

COPY

ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale:

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent as may be known and accessible to ASSIGNOR and will testify as to the same in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce said application, said invention and said Letters Patent which may be necessary or desirable to carry out the purposes hereof.

IN WITNESS WHEREOF, have hereunto set hand and seal
this day of July 16, 2001

FULL NAME(S) OF INVENTOR(S)

<u>Keishi OHASHI</u>	Keishi OHASHI
<u>Masafumi NAKADA</u>	Masafumi NAKADA
<u>Kiyokazu NAGAHARA</u>	Kiyokazu NAGAHARA
<u>Kunihiko ISHIHARA</u>	Kunihiko ISHIHARA
<u>Nobuyuki ISHIWATA</u>	Nobuyuki ISHIWATA

WITNESSES:

Tsunetake Watanabe [Signature]

COPY

Instruction sheet for assignment

All information, names of inventor(s) and assignee, title of invention and particulars of application should be completed.

No witnessing or legalization is necessary. However, if this assignment is legalized then it will only be prime facie evidence of the execution of the assignment.

Signing

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CHANGE OF CORRESPONDENCE ADDRESS Application

Address to:
Assistant Commissioner for Patents
Washington, D.C. 20231

Application Number	DIV of USSN 09/916,529
Filing Date	concurrently (5/21/03)
First Named Inventor	Hayashi et al.
Art Unit	not assigned
Examiner Name	not assigned
Attorney Docket Number	02230028BA

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I am the :



Applicant/Inventor.



Assignee of record of the entire interest.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).



Attorney or Agent of record.



Registered practitioner named in the application transmittal letter in an application without an executed oath or declaration. See 37 CFR 1.33(a)(1). Registration Number _____

Typed or Printed
Name

Michael E. Whitham (Reg. No. 32,635)

Signature

COPY

Date

May 21, 2003

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.



*Total of _____ forms are submitted.

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.